



**NOTES:**

1. THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:  
A) CIMCOOL 5 STAR 49  
B) TRIM SOL
3. ALL SURFACES MUST BE MACHINED FOR CLEAN UP
4. TUNGSTEN ALLOY OF 95% TUNGSTEN OR MORE WITH REMAINDER OF NICKEL AND IRON PER MIL-T-210140, CLASS 3, UHV GRADE
5. FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
6. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF  $1 \times 10^{-9}$  TORR CAN BE ACHIEVED
7. HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
8. BREAK ALL SHARP CORNERS .01
9. DIMENSIONS IN [ ] ARE MILLIMETERS AND FOR REF. ONLY
10. SURFACE ROUGHNESS  $\sqrt{63}$

REF. SOURCE

KULITE TUNGSTEN CORP.  
160 EAST UNION AVENUE  
EAST RUTHERFORD, NJ 07073  
TEL: 1-201-438-9000  
FAX: 1-201-438-0891

MITEK METALS INC,  
1340 NORTH SENATE AVENUE  
INDIANAPOLIS, IN 46202  
TEL: 1-317-637-3574  
FAX: 1-633-7224

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF		
TOLERANCES		ARGONNE NATIONAL LABORATORY		
DECIMALS	ANGULAR	P8530001-00		
.X - .1 [2.5]	- 0'30"	DRAWN BY: MUSCIA		
.XX - .01 [0.25]		DATE: 4/28/97		
.XXX - .005 [0.13]		CHIEF DESIGN ENGINEER: D. Shu		
SURFACE ROUGHNESS $\sqrt{125}$		DATE: 6/6/97		
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.		GP LEADER: T.M. Kuzay		
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1		DATE: 6/9/97		
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		PROJECT MGR.:		
DO NOT SCALE DRAWING		DATE: 4/28/97		
RESPONSIBLE ENGINEER: J. CHANG		DATE: 5/20/97		
APPROVED/RELEASED:		DATE:		
MATERIAL: SEE NOTE #4		SCALE: 1:1		
REVISIONS		SIZE: C		
		DRAWING NUMBER: P8-530001-00		
		SHEET: 1 of 1		

**ADVANCED PHOTON SOURCE**  
P8-50 MONO SHUTTER FOR  
1-ID BACKSCATTERING  
TUNGSTEN BLOCK